

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of the Claims:

1. (Currently Amended) A method comprising:
receiving a write request in parts;
receiving a read request within a write packet; and
preempting transfer of write data with the read request by not completing the write request until all of the parts of the write request are received.
2. (Cancelled)
3. (Original) The method according to claim 1, wherein the read request preempting the write data is received in time after the write request.
4. (Original) The method according to claim 1, wherein the read request and write request each have an associated link layer control.
5. (Original) The method according to claim 1, wherein the read request is selected from the group consisting of a memory read request, a device read request, and a configuration read request.

6. (Original) The method according to claim 1, wherein the write request is selected from the group consisting of a memory write request, a device write request, and a configuration write request.

7. (Currently Amended) An apparatus comprising:

a memory system having an input, an output, and a control;

a memory port having a memory input, a memory output, a memory control, a processor input, a processor output, and a processor control, wherein the memory system input is coupled to receive the memory port memory output, the memory port memory input is coupled to receive the memory system output, and the memory system control is coupled to the memory port memory control, and

a processor having a memory output, a memory input, and a memory control, wherein the memory port processor input is coupled to receive the processor memory output, the processor memory input is coupled to receive the memory port processor output, and the processor memory control is coupled to the memory port processor control;

wherein the memory port has a memory port protocol allowing a processor write request received in parts to be preempted by a processor read request by not completing the write request until all of the parts of the write request are received, and wherein the read request is within a write packet.

8. (Cancelled)

9. (Previously Amended) The apparatus of claim 7, wherein the memory port protocol further comprises a payload packet and an associated link layer control

packet.

10. (Currently Amended) A machine-readable medium having stored thereon instructions, which when executed causes a system to:

issue a write request in parts;

issue a read request within a write packet; and

preempt transfer of write data with the read request by not completing the write request until all of the parts of the write request are received.

11. (Cancelled)

12. (Original) The machine-readable medium according to claim 10, wherein the read request and the write request each further comprise an associated link layer control.

13. (Currently Amended) A system comprising:

a processor capable of issuing a read request within a write packet, and a write request in parts; and

a memory device coupled to the processor wherein processor transfer of write data is preempted by the processor read request by not completing the write request until all of the parts of the write request are received.

14. (Cancelled)

15. (Original) The system of claim 13, wherein the read request and write request each further comprise an associated link layer control.

16. (Currently Amended) An apparatus comprising:
- means for receiving a write request in parts;
 - means for receiving a read request within a write packet; and
 - means for preempting transfer of write data with the read request by not completing the write request until all of the parts of the write request are received.
17. (Original) The apparatus of claim 16, wherein means for preempting the write data with the read request is a means for receiving a link layer control associated with the read request.
18. (Original) The apparatus of claim 16, wherein means for preempting the write data with the read request is a means for receiving a link layer control associated with the write request.
19. (Currently Amended) A method comprising:
- receiving a read request flit within a write packet; and
 - dispatching an early read request from a read request flit to a memory from the request flit during the receiving.
20. (Original) The method according to claim 19, wherein dispatching the early read request to the memory occurs after receiving a first half of the read request flit.
21. (Original) The method according to claim 20, wherein the first half of the flit

has an indicator for early dispatch of the early read request to the memory.

22. (Original) The method according to claim 21, wherein the indicator for early dispatch of the read request is selected from the group consisting of early dispatch of read allowed and early dispatch of read not allowed.

23. (Currently Amended) An apparatus comprising:

a memory system having an input, an output, and a control; and

a memory port having a memory input, a memory output, and a memory control, wherein the memory system input is coupled to receive the memory port memory output, the memory port memory input is coupled to receive the memory system output, and the memory system control is coupled to the memory port memory control;

wherein the memory port has a memory port protocol supporting an early read request by dispatching the read request from a read request flit to a memory while receiving the read request flit, and wherein the read request flit is within a write packet.

24. (Cancelled)

25. (Previously Amended) The apparatus of claim 23, wherein the early read request is located within a first half of a read request flit.

26. (Currently Amended) A machine-readable medium having stored thereon instructions, which when executed causes a system to:

receive a read request flit within a write packet; and

dispatch a read request from the read request flit to a memory while the read request flit is being received.

27. (Original) The machine-readable medium according to claim 26, wherein dispatching the read request to the memory occurs before receiving the entire read request flit.

28. (Original) The machine-readable medium according to claim 27, wherein the first half of the flit has an indicator for early dispatch of the read request to the memory selected from the group consisting of early dispatch of read allowed and early dispatch of read not allowed.

29. (Currently Amended) A system comprising:

a processor capable of issuing an early read request from a read request flit, wherein the read request flit is within a write packet; and

a memory device coupled to the processor capable of receiving the early read request and performing an early read of a memory while the read request flit is being received.

30. (Original) The system of claim 29, wherein the processor early read request is issued within a first half of a read request flit packet.

31. (Original) The system of claim 30, wherein the first half of the read request flit packet has an indicator for early dispatch of the read request to the memory device selected from the group consisting of early dispatch of read allowed and early dispatch of read not allowed.

32. (Currently Amended) An apparatus comprising:

means for issuing an early read request from a read request flit, wherein the read request flit is within a write packet; and

means for a memory device to receive the early read request and perform an early read of a memory while the read request flit is being received by the memory device.

33. (Original) The apparatus of claim 32, wherein means for issuing an early read request is a means for setting an indicator in a first half of a read request flit.

34. (Original) The apparatus of claim 32, wherein means for performing the early read of the memory is controlled by an indicator selected from the group consisting of early dispatch of read allowed and early dispatch of read not allowed.

35. (Currently Amended) A method comprising:

receiving a first half of a read request flit within a write packet; and

dispatching a read request from the read request flit to a memory before receiving a second half of the read request flit.

36. (Original) The method according to claim 35, wherein dispatching the read request to the memory occurs before receiving a second half of the read request flit.

37. (Original) The method according to claim 35, wherein dispatching the read request to the memory occurs before error checking an entire read request flit.